

INTRODUCTION

EnSight supports files written from ESTET (a commercial CFD solver). The ESTET format supports block structured meshes and is only available in binary format.

Reading data into EnSight is a two-step process. First, the appropriate files are selected. This step is largely the same regardless of the format of the data being read. Second, parts are constructed using an interface that is specific to the applicable data format. This article covers the second step for ESTET data. See How To Read Data for more information on selecting the appropriate files.

ESTET datasets consist of the following files. Note that the entry in the File Name column is only a suggestion – it typically does not matter to EnSight what the actual file name is.

File	File Name	Notes	Required?
Geometry	file	Contains coordinates and variables	required

BASIC OPERATION

After you have specified the appropriate data files with the File Selector (opened with File > Data (Reader)... as discussed in How To Read Data) and clicked Okay, the Data Part Loader (ESTET) dialog will open. You use this dialog to build the desired vector variables and parts. Before you build parts, you have the option of building vector variables from the set of available scalar variables. To build vector variables:

After you click Okay in the File Selection dialog, the ESTET ESTET Vector Builder Vector Builder dialog will open. To build vector variables, you select the desired X,Y,Z components (one at a time) 'Available Variables' from the Available Variables list and then click the velocity_U corresponding "Set-?-Comp" button. velocity_V velocity_W 1. Select the name of the X component of the desired temperature vector variable. density dt_dt0_functio temperature Potentiel_reel Potentiel Imag pressure velocity_U Set X-Comp 2. Click Set-X-Comp. Set Y-Comp 3. Perform steps 1 and 2 for the Y and Z components. Set Z-Comp Vector Descript 4. Enter a name for the new vector variable. **Build Vector** 5. Click Build Vector. New Vector Variables 6. Build another vector variable or click Okay. Okay Help







After you click Okay, the Data Part Loader (ESTET) opens. To build parts for the ESTET format data:

1. If the Data Part Loader dialog is not open, select File > Data (Part Loader)... Data Part Loader (ESTET) Create ESTET Parts By 2. You can select the domain from which Element Domain Inside 🔲 3D border, 2D full 🔲 Visual Rep. to build the part: Inside, Outside, or Feature Angle Using Node Ranges: 3. If desired, specify From, To, and Step Step From To Delta Min Max IJK values for the part. The From and 39 29 1 To values are inclusive. Valid values in the From and To fields are 1 15 1 0 1 15 numbers advancing from 1(the min for each K 28 28 part), or numbers decreasing from 0(the max for each part): Part Descript 1,2,3,... ---> <--- ...-3,-2,-1,0 Create And Load Structured Part min max (always 1) (varies per part) Iblanked Part Creation If you specify values that will be outside of the range of an individual part, the proper min or max ****NOTE****: Variables will not be loaded for values for the given part will be used. newly created parts until this dialog is closed. The Min and Max values are for reference Close Help only. 5. If desired, enter a name for the part (to use in the Main Parts list). 4. If you desire to extract multiple surfaces (at a constant delta) from the same zone, set one of the 6. Click Create and Load Part. directions to the desired non-zero delta value. This is a "blade row" kind of operation. Please note that 7. Open this turndown section to create this results in an unstructured part instead of a structured unstructured parts based on boundary Iblanking (such as symmetry) from any

OTHER NOTES

parts created above.

8. Click Close when done.

You can reopen the Data Part Loader dialog at any time to build additional parts. Simply select File > Data Part Loader)... and build the desired parts as described above. You cannot, however, return to the ESTET Vector Builder dialog.

SEE ALSO

How To Read Data

User Manual: ESTET Reader



